



## **Liquefied Natural Gas**

Washington State Ferries (WSF) is currently exploring an option to use Liquefied Natural Gas (LNG) as a source of fuel for propulsion. WSF believes that LNG provides an opportunity to significantly reduce fuel costs, and that it can also have a significant positive environmental effect.

### **Saving money, cleaner environment**

WSF burns more than 17 million gallons of fuel each year. Fuel is our fastest growing operating expense. The fuel budget today is nearly 30 percent of the operating budget, or \$67.3 million. That's \$51.7 million more than it was 12 years ago. The fuel cost savings moving from diesel to LNG is approximately 40-50% at today's pricing.

Fueling vessels with LNG also significantly reduces emissions.

- 100 percent reduction in particulate matter and sulfur oxides
- 90 percent reduction in nitrous oxides
- 20 percent reduction in carbon dioxide

### **Worldwide examples**

The use of LNG as a marine fuel for passenger ferries is not unprecedented.

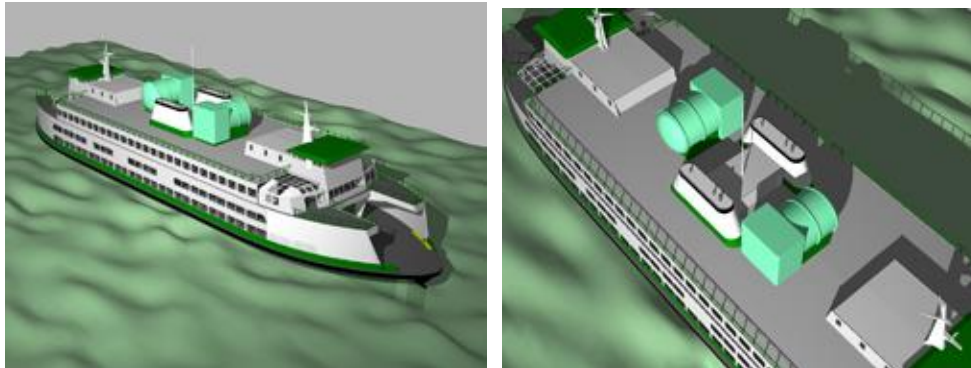
- Since 2000 the Norwegian government has allowed the construction and operation of LNG passenger vessels. There are currently more than 15 car and passenger ferries operating in Norway that are fueled by LNG.
- Both BC Ferries and Staten Island Ferries are studying options to retrofit their vessels from diesel to LNG fuel.



- The Quebec Ferries Company has contracted for three new LNG ferries.
- There are LNG passenger vessels currently under construction or in design for service in Argentina, Uruguay, Finland, and Sweden.

### **WSF proposal**

The current proposal is to retrofit six Issaquah Class ferries to use LNG as their sole source of fuel. These vessels would be fueled by trucking in LNG from sources in British Columbia or the Pacific Northwest.



Renderings of LNG tanks on an Issaquah class ferry

### **Next steps**

- Safety and security assessments
- Operational plan and training plan development
- Detailed business case analysis

### **Contact**

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